

PHASE I BOOK EXPLOITATION SOV/4114

\* Mitskevich, A.P.

Elektrolyuminestsentsiya (Electroluminescence) Moscow, 1959. 127 p.  
1,000 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut nauchnoy informatsii; USSR. Sovet Ministrov. Gosudarstvennyy nauchno-tehnicheskiy komitet.

Ed.: A.B. Katsman; Tech. Ed.: G.A. Shevchenko.

PURPOSE: The purpose of this book is to introduce the general scientific reader to research in electroluminescence and to acquaint him with the nature and results of basic work in this field.

COVERAGE: The author describes experiments, methods of work, and individual areas of research. Mathematical formulas and calculations are given only when they are needed to explain results obtained. No personalities are mentioned. There are 99 references: 4 Soviet,

Card 1/4

\* See also Dneprov, A (pen name)

\* MITSKEVICH, A. P.

MITSKEVICH, A. P. -- "The Problem of Dichromism of Microcrystalline Films of Organic Dyes." Sub 3 Mar 52, Physico Inst imeni P. N. Lebedev. (Dissertation for the Degree of Candidate in Physico-mathematical Sciences).

SO: Vechernaya Moskva January-December 1952

\* See also Dneprov, A (pen name)

MITSKEVICH, A.M.

Simple stepped concentrator for generating torsional oscillations.  
Akust. zhur. 10 no.3:372-373 '64. (USSR 1964)

1. Akusticheskiy institut AN SSSR, Moskva.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

MITSKEVICH, A.M.

Fourth All-Union Conference on the use of ultrasound in  
mechanical engineering. Akust. zhur. 10 no.1:128-130 '64.  
(MIRA 17:5)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

REF ID: A651371

analytical expression for the efficiency coefficient. When using this method, the author recommends a round tube with internal flow of the heat carrier as a standard. Orig. art. has: 26 formulas and 2 figures.

SUB CODE: 20/ SUBM DATE: 31Aug65/ ORIG REF: 004/ OTH REF: 000

JW  
2/2

REF ID: A6750 RMTD/DSG/V/ DPP(n)-2/TNS(m) RL/GR

DOC NO. A16004371 SOURCE CODE: UR/0000/65/000/000/0270/0276

AUTHOR: Mikheev G. I.

A9

F+1

CITE: Central Boiler and Turbine Institute im. I. I. Polzunov,  
(Centralnyy kotloturbogennyy institut) 14/55

TOPIC: Efficiency of heat transfer surfaces

SOURCE: Teplo- i massoperenos. t. 1: Konvektivnyy teploobmen v  
homogennoy sredy (heat and mass transfer. v. 1: Convective heat exchange  
in an homogeneous medium). Minsk, Nauka i tekhnika, 1965, 270-276

TOPIC TAGS: convective heat transfer, surface property, tube

ABSTRACT: The article proposes a method for estimation of efficiency in  
convective heat transfer applicable to different types of surfaces. The  
main feature of the method is that comparison of heat transfer sur-  
faces is carried out for identical construction volumes (and not for  
similar areas), which eliminates uncertainty in interpretation of the  
results obtained by other methods. The efficiency coefficient can be  
determined analytically if we have given the heat transfer and hydrodynamic  
characteristics of the surfaces being compared. By mathematical  
manipulations based on the foregoing premises, the author arrives at an

Cm. 2/2

SOURCE: Mikrobiologii	SOURCE CODE: UR/0016/65/000/011/0103/0105
AUTHOR: Minkevich, A. I.	
ORG: Odessa Medical Institute (Odeskiy meditsinskij institut)	
TITLE: Effect of toxins of the principal pathogens of gas gangrene on the absorptive function of cells of the reticuloendothelial system in the liver and spleen	
SOURCE: Zhurnal mikrobiologii, epidemiologii i imunobiologii, no. 11, 1965, 103-105	
TOPIC/TAGS: cell physiology, toxicology	
ABSTRACT: The severe clinical course of gas gangrene is due to marked depression of the protective mechanisms of the body, the reticuloendothelial system in particular. The author investigated the effect on reticuloendothelial cells of dry toxins of <i>Clostridium perfringens</i> , <i>C. septicum</i> , <i>C. weltevredenii</i> . These toxins were found to reduce the absorptive function of reticuloendothelial cells in the liver and spleen 5-10 fold. <i>C. perfringens</i> and <i>C. weltevredenii</i> toxins after 45 minutes in an incubator had the most pronounced effect. Microtoxins of the toxins decreased the ingestive capacity of the reticuloendothelial cells sometimes as much as 40-fold. There was also a relationship between the ingestive capacity of the cells and the amount of toxin used.	
These findings have both theoretical (explanation of pathogenesis) and practical implications (course of the disease). Orig. art. has: 1 table. [JPRS]	
SUB CODE: US/ SUBTITLE: 29Jun64	
TYPE: 1/1	UBC: 613.631.57/08-07/265-24001/11/7-018.24-008.6.07

MITSKEVICH, A.I. (Odessa, ul. Ostrovidova, d.79, kv.4)

Deep sporotrichosis in the form of multiple relapsing tumors. Nov.  
khir.arkh. no.6:96-97 E-D '59. (MIRA 13:4)

1. Kafedra obshchey khirurgii (naveduyushchiy - prof. Ye.D. Dvushil'-  
naya) Odesskogo meditsinskogo instituta.  
(SPOROTRICHOSIS)

MITSKEVICH, A.I.

M.P. Sokolovskii's method of surgery in hydrocephalus. Vop.neiro-khir. 22 no.6:29-30 N-D '58.  
(MIRA 12:2)

1. Klinika fakul'tetskoy khirurgii i klinika obshchey khirurgii  
Odesskogo meditsinskogo instituta imeni N.I. Pirogova.  
(HYDROCEPHALUS, surgery,  
Sokolovskii's operation (Rus))

MITSKEVICH, A.I., aspirant

**Treating hydrocephalus with internal drainage.**  
Azerb.med.zhur. no.2:90-94 F '58 (MIRA 11:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. M.P. Sokolovskiy) i kliniki obshchey khirurgii (zav. - prof. Ye. D. Dvushil'naya) Odesskogo meditsinskogo instituta (direktor - prof. I.Ya. Doyneka).

(HYDROCEPHALUS)  
(DRAINAGE, SURGICAL)

APPROVED FOR RELEASE: 06/23/11 CIA-RDP86-00513R001134700005-6

LITSLEVICH, A.I., Cardiol Sci--(disc) "Surgical treatment of cerebral edema by the K.I. Solntsevsky method." (disc), 1957. (1957) (discs: State Med Inst in U.I. Kirpiv), two copies (1957-1958, 119)

- 171 -

Criterial working-out ...

S/114/62/000/008/002/006  
E194/E455

where  $L_1$  is the length of rod over which heat transfer takes place and  $L_2$  the remaining length of the rod. A corresponding expression is obtained for a circular rib cooled by an axial flow of heat-transfer medium. The method of working out the experimental data described here is recommended for other cases of complex heat-transfer, for instance for transverse flow over tubes or longitudinal flow over closely-packed bundles of tubes when the heat transfer coefficient is not constant over the tube perimeter. However, the use of these analytical relationships for unfamiliar arrangements requires experimental verification.

There are 2 figures. ✓

Card 3/3

S/114/62/000/008/002/006  
E194/E455

Criterial working-out ...

where  $Nu = (qd_3)/(\Delta t \lambda_T)$ ;  $d_3$  - a typical mean dimension of the system;  $\lambda_T$  and  $\lambda_M$  - thermal conductivity coefficients of the heat-transfer medium and surface material;  $L_T$  and  $L_M$  - typical linear dimensions that govern motion of the heat-transfer medium and the surface geometry at the place of flow. To simplify the calculations an experimental relationship must be found between the parameters by specially working up the experimental data. In engineering practice, the final criterial formulae can often be considerably simplified by obtaining a combination criteria and solving the equations of heat distribution for an element of surface geometry, assuming a heat-transfer law. Two examples show that test results are best worked out in the form  $St = f(R_{\text{meas}}, Pr_{\text{meas}})$  where  $R_{\text{meas}} = Re(\lambda_T/\lambda_M)^P$  and  $Pr_{\text{meas}} = Pr(\lambda_T/\lambda_M)^Q$ . The cases examined are and elements of heat-transfer surfaces; a rod and a circular rib with uniform cooling over the perimeter. The following expression is obtained for a rod

$$St_{av} = f \left[ R_{\text{meas}}, Pr_{\text{meas}}, \frac{L_1 + L_2}{f}, \frac{L_2}{L_1} \right] \quad (11)$$

Card 2/3

26.5200

AUTHORS: Borishanskiy, V.M., Doctor of Technical Sciences,  
 Mitskevich, A.I., Candidate of Technical Sciences

TITLE: Criterial working-out of complicated cases of convective heat-transfer

PERIODICAL: Energomashinostroyeniye, no.8, 1962, 18-20

TEXT: In the general case of convective heat-transfer, the temperature is not uniform over the surface and the heat-transfer coefficient accordingly varies from place to place on the surface. Complicated temperature distributions arise in ribbed cooling surfaces. Here the criterial heat-transfer relationship should include, in addition to the usual criteria, complexes obtained for the heat balance conditions on the boundary of separation between the surface and the heat-transfer medium i.e.

$$\text{Nu} = f_1 (\text{Re}, \text{Pr}, \frac{\lambda_{TM}}{\lambda_{MLT}}) \quad (1)$$

$$\text{or} \quad \text{St} = f_2 (\text{Re}, \text{Pr}, \frac{\lambda_{TM}}{\lambda_{MLT}}) \quad (2)$$

Card 1/3

✓

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

REZVOV, K.M., kand. tehn. nauk, dots.; BLOKOV, P.K., inzh.; MITSKEVICH,  
A.F., rabochiy-novator.

Mechanizing the lapping of flat parts. Sbor. st. LITMO no.23:63-67  
'57.  
(MIRA 11:5)  
(Grinding and polishing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

MITSKEVICH, A., kand.tekhn.nauk

Figures instead of intuition. Znan. silla 36 no.10:40-41 O '61.  
(MIRA 16:12)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

MITSKEVICH, A., kand.fiziko-matematicheskikh nauk

How the photon was weighed. Tekh.mol. 30 no.9:9 '62.  
(MIRA 15:9)  
(Photons)

MITSKEVICH, A., kand.fiziko-matematicheskikh nauk

Machine planning means a control of losses, new resources and the highest organization of work. Tekh.mol. 29 no.9:2-3 '61.

(MIRA 14:10)

(Automation)

22214-4  
REF ID: A66019077 SOURCE CODE: UR/0239/65/051/005/054/0546  
 UTHOR: Mikhalev, V. P., Mikhalev, A. N.  
 093) Laboratory of Electroencephalography, Medical Institute, Leningrad (Laboratoriya B  
 Elektroenzfalografii Meditsinskogo Instituta)  
 TITLE: Differences in the effects of amphetamine and eserine on the electrocorticogram of rabbits  
 SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 5, 1965, 544-546  
 (PUB MED: pharmacology, EEG, rabbit, bicelectric phenomenon, cerebral cortex, neurophysiology)  
 ABSTRACT: In experiments with rabbits, the effect of amphetamine (5 mg/kg) on the bicelectric activity of the cerebral cortex depended on the initial background of this activity. Against the background of slow activity, this drug produced a pronounced desynchronization; the median amplitude of the electrocorticogram decreased, while the number of waves increased. Against a background of desynchronization, amphetamine reduced the number of waves and increased to a small extent their median amplitude. Eserine (0.3 mg/kg), on the other hand, increased the number of waves in either case, while its effects on the amplitude were similar to those of amphetamine. The difference in the action of the two drugs, which apparently reflects the mechanism of desynchronization centered in the reticular formation, is presumably related to the fact that amphetamine acts directly on synaptic transmission in the same manner as noreadrenaline, while eserine acts as a cholinesterase inhibitor, producing an endocrine accumulation of acetylcholine. It is assumed that the reticulocortical system which brings about desynchronization has both an adrenergic and cholinergic link. (orig. art. has: 2 figures. (PR57))  
 SUR CODE: 06 / STEM DATE: 13 Jan 66 / ORIG REF: G02 / 7TH REF: 013

Conf 1/1

WDC: 672-322-3

METSIKHE, V.P. [Mikhe, V.]

Quantitative study of depolarization of the motor end plate induced by phenamine and physostigmine. Farmakolog. i. no. 3(17), 273. My-32 145.

[MLSA 1005]

I. Laboratoriya elektroenzepatografii (yav. s. o. zdr. A. M. Mikhe).  
[Mikhe, A.] Kazanetskogo meditsinskogo instituta.

MITSKENE, A. Yu. Cand Chem Sci -- (diss) "Kinetics of the reduction of chromic acid and its relation to the material of the cathode." Vil'nyus, 1959. 14 pp (Min of Higher Education USSR. Vil'nyus State Univ im V. Kapsukas), 170 copies (KL, 43-59, 121)

MITSFAN, I.I., inzh.

Introducing the MGM-1 machine for gas cutting to scale with a photo-copying-type drive. Svar. proizv. no. 3:23-25 Mr '64. (MIRA 18:9)

1. Nikolayevskiy sudostroitel'nyy zavod im. I.I.Nosenko.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

MITSKAN, I.I., inzh.; GUBA, A.I., inzh.

Pack cutting with low-pressure oxygen. Sver. protiv. 12:36-37  
D 163. (MIRA 18:9)

I. Nikolayevskiy sudostroitel'nyy zavod im. L.T.Nesterko.

MITSKA, K.

Category: USSR

B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7689

Author : Mitska, K. and Vlchek, A. A.  
Inst : Not given

Title : Diffusion in Electrolytes and the Polarographic Method. A Reply to  
Ya. P. Gokhshteyn

Orig Pub: Zh. Analit. Khimii, 1956, Vol 11, No 4, 510-512

Abstract: A Discussion (RZhKhim, 1955, 40594).

Card : 1/1

-23-

MITSINSKIY, N.V.

MEL'NIK, M.A.; IVANOV, A.S.; PODGAYETSKAYA, M.G., kandidat meditsinskikh  
nauk; BABAEVA, Ye.P.; LESTOVETSKAYA, G.I.; MITSINSKIY, N.V.

Treating mycoses of the scalp with "Lesovaya" liquids nos 1 and 2  
without using X rays. Report No.2. Vest.ven. i derm. 30 no.4:52-53  
Jl-Ag '56. (MLRA 9:10)

1. Iz mikologicheskogo otdeleniya Kiyevskogo gorodskogo kozhno-  
venerologicheskogo dispensera.  
(ANTISEPTICS) (DERMATOMYCOSIS) (SCALP—DISEASES)

SKORODINSKIY, Z.P. [Skorodyns'kyi, Z.P.], etv. red.; BERKOVICH, Ye.M.,  
prof., nauchn. sotr., red.; GZHITSKIY, S.Z. [Gzhits'kyi, S.Z.].,  
[red.], prof., red.; MITSIK, V.Yu., red.; PUPIN, I.G.  
[Pupin, I.G.], red.; SHOKUN, V.Yu., red.; PALFIY, F.Yu., red.

[Abstracts of reports of the First Scientific Conference of  
Graduate Students] Tezy dopovidei Pershei aspirants'koi na-  
ukovoi konferentsii. L'viv, 1963. 62 p. (MIRA 17:2)

1. Ukrains'kyi naukovo-doslidnyi instytut fiziologii i biokhi-  
mii sil's'kohospodars'kykh tvaryn.
2. L'vovskiy zooveterinar-  
nyy institut i Chlen-korrespondent AN Ukr.SSR (for Gzhitskiy).
3. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii i  
biokhimii sel'skokhozyaystvennykh tvaryn (for Berkovich)

SEARCHED		INDEXED	FILED
JUN 21 1966 (65-103) 1095		57	
SEARCHED		INDEXED	FILED
JUN 21 1966 (65-103) 1095		57	
<p>A new non-destructive testing instrument is described which is based on the principle of ultrasonic wave propagation. Variation in thickness of various materials can be measured, such as sheet metal, plates, blocks, etc. The instrument is a non-destructive testing device which can measure the thickness of various materials. A block diagram of the instrument is shown. The instrument consists of two main parts: a transmitter and a receiver. The transmitter emits ultrasonic waves which travel through the material and are reflected back by internal boundaries. The receiver detects these reflected waves and measures their time of flight. This information is used to calculate the thickness of the material. The instrument is designed to be portable and can be used in various industrial applications.</p>			
<p>RECORDED</p>			
<p>SEARCHED INDEXED FILED JUN 21 1966 (65-103) 1095 OTHER: (X)1</p>			

MITSIK, G. YE.

Cand Agr Sci, Diss -- "Effect of plant cover and soil working on the thermal condition of the leached black soils of North Caucasus".  
Krasnodar, 1961. 20 pp, 20 cm (Min of Agr RSFSR. Stalingrad Agr Inst),  
160 pp, No charge (KL, No 9, 1961, p 186, No 24392), 61-55901

DUBROVIN, Ye.; KARMAL'SKIY, O.; FILATOV, G.; LOKOTKOV, A.; LEBEDINSKIY, A.; BARANOV, I.; MITSEVICH, P.; BABENKO, Ye.; GOLITSIN, A. (Ozery, Moskovskoy obl.); SHCHEPOTIN, I. (Ozery, Moskovskoy obl.); KHALANGOT, A. (Snezhnoye, donetskoy obl.); KUZ'MICH, N. (Snezhnoye, Donetskoy obl.); SIRITSA, A., inzh. po ratsionalizatsii

This is the way we live. Izobr. i rats. no.10:4-5, 23 '63.

(MIRA 17:2)

1. Chlen soveta obshchestvennogo konstruktorskogo byuro zavoda im. V.I. Lenina (for Karmal'skiy).
2. Predsedatel' Amurskogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Filatov).
3. Predsedatel' Chelyabinskogo promyshlennogo oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Lokotkov).
4. Starshiy [redacted] Odesskogo zavoda imeni Dzerzhinskogo (for Lebedinskiy).
5. Predsedatel' zavodskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Baranov).
6. Predsedatel' soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov Irkutskogo zavoda tyazhelogo mashinostroyeniya imeni Kuybysheva (for Mitsevich).

MITSNEVICH, G.

Training personnel for the merchant marine. Mor.flot 7 no.11:  
29-32 N '47. (MIRA 9:6)  
(Merchant seamen) (Communist education)

MITSEVICH, A.K., kand.tekhn.nauk

Investigations in the United States on the economic efficiency  
of nuclear-powered sea transportation vessels [from "United States  
Atomic Energy Commission," 1959; "Atomic Industrial Forum," 1960;  
"Nucleonics," no.8, 1961]. Sudostroenie 28 no.4:67-71 Ap '62.  
(MIRA 15:4)

(United States--Atomic ships--Cost of operation)

MITSEV, Yu.S.

Molding Mettlach tiles. Stek. i ker. 18 no.12:30 D '61.  
(MIRA 16:8)

1. Khar'kovskiy plitechnyy zavod.  
(Kharkov--Tiles)

SOBOLEV, G.P.; MITSEV, Yu.S.

Effectiveness of using rotary grinders for grinding clayey  
materials. Stek. i ker. 18 no.6:37-40 Je '61. (MIRA 14:7)  
(Grinding machines)  
(Clay)

ZABLOTSKAYA, V.Ya.; MITSENMAKHER, M.S.

Achievements of the efficiency promoters of a leather goods factory.  
Kozh.-obuv.prom. 3 no.11:37-39 N '61. (MIRA 15:1)  
(Moscow--Leather goods industry)

MITSENKO, A.A.

"An Investigation of Wide-Cut Units with Accessory Trailers  
Machines";

dissertation for the degree of Candidate of Technical Sciences  
(awarded by the Timiryazev Agricultural Academy, 1962)

(*Investiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii*, Moscow, No. 2,  
1963, pp 232-236)

MITSENKO, A.A., inzh.

Determining accelerations in tractor-driven machinery. Mekh.i elek.  
sots.sel'khoz. 16 no.5:30-31 '58. (MIR 11:11)

1. Stalingradskiy sel'skokhozyaystvennyy institut.  
(Machinery, Kinematics of)

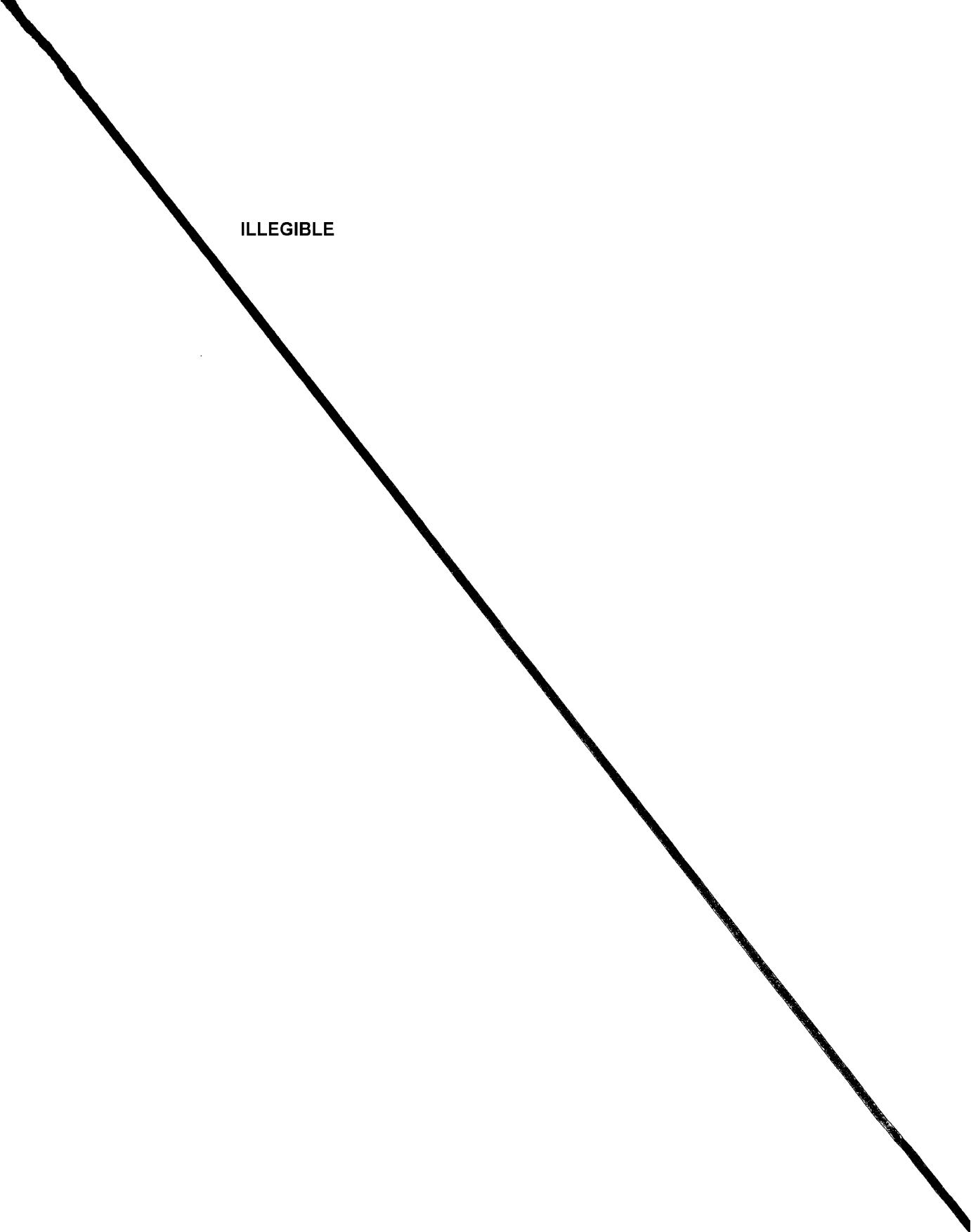
KOROTKOV, A.A.; AZIMOV, Z.A.; MITSENGENDLER, S.P.

Butyllithium-catalyzed polymerization of phenyl methacrylate.  
Vysokom. soed. 7 no.8:1326-1331 Ag '65. (MIRA 18:9)

1. Institut vrysokomolekulyarnykh soyedinineniy AN SSSR.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

ILLEGIBLE



ACCESSION NR: AP 4010039

SSSR (Institute of High Molecular Compounds, Academy of Science SSSR)

SUBMITTED: 01Apr63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: CH, PH NO REF SOV: 008 OTHER: 003

ACCESSION NR: AP4010039

ent constants, the activation energy and the pre-exponents of the elemental reactions (formation of polymerization centers, chain growth and termination, and destruction of catalyst) were calculated. Values for t-BMA were compared with those for methylmethacrylate (MMA) and n-butylmethacrylate (n-BMA). The high values for the pre-exponents in the Arrhenius equation for t-BMA (in the  $10^{13}$  range as compared to  $10^3$  and  $10^5$  for MMA and n-BMA) determined the notably high apparent constants of the elemental reactions. The complex compounds formed as intermediates in the elemental reactions are less stable than those of MMA and n-BMA. The ratio of the constants for the reaction of forming active centers to the chain growth reaction is higher for the t-BMA; the polymerization proceeds without an induction period and the product polymers have a lower molecular weight than those of MMA and n-BMA. In polymerizing alkylmethacrylates 0.5%-6% of the n-butyllithium is spent on the reaction of forming active centers; the main portion is spent on reaction with the C=O bond. Orig. art. has: 7 figures, 3 tables and 6 equations.

ASSOCIATION: Institut vy\*sokomolekulyarniy\*kh soyedineniy Akademii nauk

Card 2/3

ACCESSION NR: AP4010039

S/0062/64/000/001/0055/0061

AUTHOR: Azimov, A. A.; Korotkov, A. A.; Mitsengendler, S. P.

TITLE: Kinetics and mechanism of polymerizing ter.-butylmethacrylate with n-butyllithium.

SOURCE: AN SSSR, Izvestiya, Ser. khim., no. 1, 1964, 55-61

TOPIC TAGS: tert.butylmethacrylate polymerization, methylmethacrylate polymerization, n. butylmethacrylate polymerization, polymerization kinetics, polymerization mechanism, n. butyllithium, homogeneous polymerization, reaction constant, activation energy, polymerization center formation, chain growth, chain termination, catalyst destruction, reaction rate, alkylmethacrylate, polymerization

ABSTRACT: The kinetics and polymerization mechanism of homogeneous polymerization of tert.-butylmethacrylate (t-BMA) in toluene at -50C to -70C in wide ranges of monomer and catalyst concentrations were studied. The appar-

Cord 1/3

AZIMOV, Z.A.; KOROTKOV, A.A.; MITSENGENDLER, S.P.

Kinetics and mechanism of n-butyl methacrylate polymerization  
under conditions of isotactic polymer formation. Vysokom.sod.  
5 no.8:1144-1151 Ag '63. (MIRA 16:9)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Methacrylic acid) (Polymerization)

Effect of the nature of the ...

S/190/63/005/002/009/024  
B101/B102

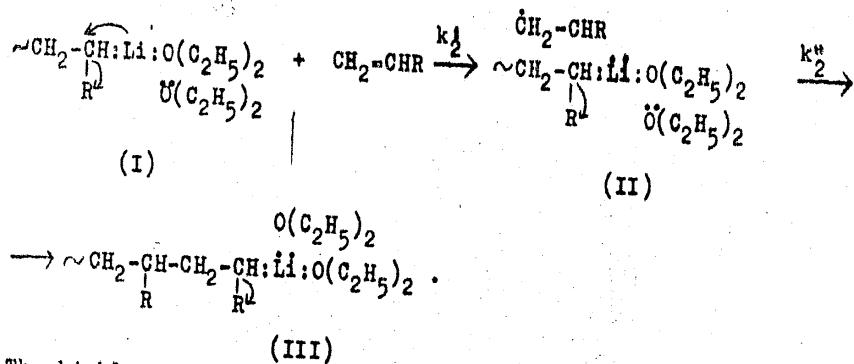
of III → III isomerization becomes commensurable with the rate of II formation by reason of steric hindrance. The total rate depends thus on  $k_2^{\prime}/k_2^{\prime\prime}$  and  $\alpha \neq \beta$ . There are 3 figures and 2 tables.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR  
(Institute of High-molecular Compounds AS USSR)

SUBMITTED: July 28, 1961

Card 4/4

Effect of the nature of the ...

S/190/63/005/002/009/024  
B101/B102

The highly active ethers, such as tetrahydrofuran and ethylene glycol dimethyl ether, form stable complexes with a highly polar C-Li bond owing to slight steric hindrance and the isomerization of complex II to complex III proceeds rapidly, the structure of the components having only a small effect so that  $\alpha \sim \beta$ . With diethyl ether, dioxane, and methylal, the rate

Card 3/4

## Effect of the nature of the . . .

S/190/63/005/002/009/024  
B101/B102

ether	concentration mole/l	composition of the copolymer, %	
		St	DV
diethyl ether	1.1	13.6	86.4
dioxane	1.1	30.8	69.2
methylal	1.1	30.0	70.0
tetrahydrofuran	1.1	30.6	69.4
tetrahydrofuran	1.1	45.9	54.1
ethylene glycol dimethyl ether	3.0	48.4	54.6
	1.1	47.8	52.2

The copolymerization constants  $\alpha$  (St) and  $\beta$  (DV) were:

	$\alpha$	$\beta$
without ether	0.05	20
with diethyl ether	0.11	1.74
with tetrahydrofuran	0.744	1.030

The polymerization rate in the presence of tetrahydrofuran was 5-6 times higher than in the presence of diethyl ether and 100 times higher than without ether. This is explained by complex formation, taking diethyl ether as example:  
Card 2/4

S/190/63/005/002/009/024  
B101/B102

AUTHORS:

Mitsengendler, S. P., Aleyev, K. M., Dantsig, L. L.,  
Korotkov, A. A.

TITLE:

Effect of the nature of the ether on styrene-divinyl  
copolymerization using butyl lithium

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, v. 5, no. 2, 1963,  
212-216

TEXT: Since it has been found previously (Vysokomolek. soyed., 2, 1961,  
1960) that addition of diethyl ether accelerates the copolymerization of  
styrene (St) and divinyl (DV) and influences the composition of the  
copolymer, copolymerization of equimolecular parts of St and DV was  
performed in benzene at 30°C with 0.05 mole/l butyl lithium in the  
presence of different ethers. Results:

Synthesis of graft copolymers...

S/190/62/004/003/009/014  
B101/B144

weight or concentration of PS\* support this effect. By suitably choosing the molecular weight and the ratio of the components it is possible to synthesize copolymers with the desired composition and branching. There are 4 figures and 3 tables.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds AS USSR)

SUBMITTED: May 29, 1961

Card 3/3

## Synthesis of graft copolymers...

S/190/62/004/009/009/014  
B101/B144

components by birefringence. A graft copolymer was obtained with 100% yield. (2) The molecular weight and the ratio of components affect the reaction course: (a) An increasing molecular weight of PMMA reduces the selectivity and renders grafting of PS\* onto the macromolecule of PMMA uniform. If the molecular weight of PMMA is increased from  $70 \cdot 10^3$  to  $500 \cdot 10^3$ , and if the ratio  $\text{C}_\text{O}/\text{PS}^*$  equals 10, the amount of PMMA consumed for ether fraction decreases from 31 to 3.6%, and the yield of ether fraction from 74 to 18.6%; (b) an increasing molecular weight of PS\* increases the selectivity and reduces the uniformity of grafting. If the molecular weight of PS\* increases from  $5 \cdot 10^3$  to  $50 \cdot 10^3$ , the PMMA consumption for ether fraction rises from 3.1 to 53% and the yield of this fraction from 20.5 to 95.5%; (c) if the molecular weights of PMMA and PS\* are constant, the yield of ether fraction increases as the concentration of PS\* is increased, or as the ratio  $\text{C}_\text{O}/\text{PS}^*$  is decreased. Conclusions: The occurrence of grafting is not statistical but mainly on that PMMA macromolecule where the reaction has already started. As soon as grafting of the first PS\* chains sets in, the coiled PMMA molecules begin to stretch and thereby to facilitate further grafting. High molecular

Card 2/3

S/190/62/004/009/009/014  
B101/B144

AUTHORS: Mitsengendler, S. P., Andreyeva, G. A., Sokolova, K. I.,  
Korotkov, A. A.

TITLE: Synthesis of graft copolymers by the action of polymeric organometallic compounds on polar polymers, and study of their properties. I. Synthesis of graft copolymers of styrene and methyl methacrylate

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 9, 1962, 1366-1374

TEXT: The interaction of polystyrene lithium (PS<sup>-</sup>) with polymethyl methacrylate (PMMA) was studied. The decomposition of PS<sup>-</sup> by moisture and oxygen was eliminated by treating it in vacuo or in a nitrogen atmosphere, and through the presence of methyl lithium or calcium hydride. PMMA dissolved in toluene was cooled to -50 - -70°C and mixed with PS<sup>-</sup> cooled to -78°C. The resulting graft copolymer was extracted successively with ether, acetonitrile and benzene. The ratio >C=O/PS<sup>-</sup> was determined from the oxygen content of the graft copolymer or by IR-spectroscopy. Results: (1) All fractions differed from a mechanical mixture of the

Card 1/3

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Synthesis and investigation of the ...

S/196/62/001/006/007/026  
B112/B138

SUBMITTED: April 6, 1961

X  
Card 3/3

Synthesis and investigation of the ...

6/10/62/004/006/007/026  
B110/3136

weights increase with depth of polymerization. Since the ratio of the rate constants,  $k_2/k_1$ , is ten times higher for butyl methacrylate than for methyl methacrylate, higher molecular weights were obtained. The polymer formed in hexane is partly separated as a fine precipitate. The polymers obtained in toluene, hexane and diethyl ether have identical structure and differ from the polymers obtained by means of Li metal and  $\alpha$ -sodium naphthalene, and liquid ammonia and tetrahydrofuran. The nuclear magnetic resonance spectra showed isotactic structure for the first polymers, and syndiotactic for the second polymers. For the first group, between 1900-600  $\text{cm}^{-1}$ , fewer absorption bands exist in the IR spectra. The vitrification temperature of the first group was -15 to -14°C, that of the second one 30-33°C. For the first group, the optical anisotropy was  $\alpha = -2$ , for the second  $\alpha = -1.5$ . Densities differed only slightly (1.06-1.07). The mechanism of isotactic and syndiotactic PBMA formation appears to be similar to that of polymethyl methacrylate. There is 1 table.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR  
(Institute of High Molecular Compounds AS USSR)

Card 2/3

15. 8076

38281  
S/190/62/004/006/007/026  
R710/3136

AUTHORS: Azimov, ... A., Witsengendler, S. F., Korotkov, A. A.

TITLE: Synthesis and investigation of the structure of catalytic poly-n-butyl methacrylate. I. Synthesis of poly-n-butyl methacrylate of stereoregular structure

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 6, 1962,  
535-838

TEXT: Stereocisomeric poly-n-butyl methacrylates (PBMA) were synthesized. n-butyl methacrylate was purified by alkali, rinsed with water, dried with  $MgSO_4$  and  $KH$ , distilled and polymerized in toluene, hexane, diethyl ether, liquid ammonia or tetrahydrofuran by means of butyl lithium. Investigated were: (1) optical anisotropy of the solutions and the photoelastic effect, (2) dielectric losses, dipole moments and densities, (3) nuclear magnetic resonance and the IR spectra. Polymerization in toluene at  $-50^{\circ}C$  with butyl lithium (concentration: 1.0 and 0.004-0.005 mole/liter) produced a molecular weight of  $6 \cdot 10^6$  at 90% depth of polymerization. The molecular Card 1/3

MITSENGENDLER, S.P.; IVANOV, N.N.; KOROTKOV, A.A.

Effect of the nature of the medium and catalyst on catalytic  
polymerization. Vysokom. soed. 3 no.2:319 F '61. (MIRA 14:5)  
(Polymerization) (Catalysts)

Effect of Diethyl Ether on the Copolymerization of Divinyl and Styrene

S/190/60/002/012/009/019  
B017/B055

The maximum, 32%, is reached at 0.6 mole/l ether. With excess ether, the copolymerization constants were  $\alpha_2 = 0.11$ ,  $\beta_2 = 1.78$ . The activity of the active centers solvated by ether varies therefore. The rate of divinyl polymerization in the presence of ether approaches that of styrene. There are 5 figures, 1 table, and 10 references: 4 Soviet, 5 US, and 1 Czechoslovakian.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR  
(Institute of High-molecular Compounds of the Academy of Sciences USSR)

SUBMITTED: May 20, 1960

Card 2/2

S/190/60/002/012/009/019  
B017/B055

AUTHORS: Korotkov, A. A., Mitsengendler, S. P., Aleyev, K. M.

TITLE: Effect of Diethyl Ether on the Copolymerization of Divinyl  
and Styrene

PERIODICAL: Vysokomolekulyarnyye soyedimeniya, 1960, Vol. 2, No. 12,  
pp. 1811-1816

TEXT: The influence of diethyl ether on the kinetics of the copolymerization of divinyl and styrene and the composition of the polymerizates formed were investigated. Fig. 1 shows the dependence of polymerizate composition on diethyl ether concentration. The experimental data on the copolymerization of divinyl and styrene in the presence of excess ether (4.8 mole/l) are listed in a table. Diethyl ether increases the activities of divinyl and styrene. In the presence of diethyl ether, the copolymerization of divinyl and styrene is very rapid. The effect of diethyl ether is explained by a decrease in the dissolving role of the divinyl monomer in the presence of complexing agents. Addition of 0.05 mole/l ether increases the styrene content of the copolymer from 13 to 25%.

Card 1/2

MITSENGENDLER, S.P.

PAGE 1 BOOK INFORMATION		807/2683
International symposium on macromolecular chemistry. Moscow, 1960.		
Macromolecular Symposium No. 1: International Conference on Macromolecular Chemistry. Berlin, DDR, Moscow, 1960. 2nd Conference. Section III. (International Symposia on Macromolecular Chemistry. Berlin, DDR, Moscow, 1960; June 14-19; Papers and Discussions) Sponsoring Agency: The International Union on Macromolecular Chemistry. Section on Macromolecular Chemistry. Tech. Rep. 1960.		
PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high-molecular compounds.		
CONTENTS: Part II is Section III of a multivolume work containing papers on various topics in macromolecular chemistry. The papers in this volume, which contain mainly the kinetics of polymerization reactions initiated by different catalysts or induced by radiation, discuss the research techniques of electron microscopy and electron scattering, infrared, and light-scattering methods. There are numerous following papers on light-scattering, infrared, and ultracentrifugation. No generalities are mentioned. Authors follow: V. A. Kabanov, Ph.D.; and Z. A. Shtan'kin (USSR). Initiation of Polymerization by Anionic Compounds.	22	
FURTHER: This book is intended for chemists interested in polymerization reactions and the synthesis of high-molecular compounds.		
CONTENTS: Part II is Section III of a multivolume work containing papers on various topics in macromolecular chemistry. The papers in this volume, which contain mainly the kinetics of polymerization reactions initiated by different catalysts or induced by radiation, discuss the research techniques of electron microscopy and electron scattering, infrared, and light-scattering methods. There are numerous following papers on light-scattering, infrared, and ultracentrifugation. No generalities are mentioned. Authors follow: V. A. Kabanov, Ph.D.; and Z. A. Shtan'kin (USSR). Initiation of Polymerization by Anionic Compounds.	22	
Shiba, F., L. Kondo, and M. Aono. (Japan). Effect of the Initiator on Polymerization of Styrene by Alkali Compounds.		
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Mitalev, I., Tashirov, and E. Nagy (Czechoslovakia). On the Role of Active Centers in the Formation of Stable Caplase in Anionic Polymerization of Formic Acid.	212	
Vesely, E. (Czechoslovakia). On the Mechanism of Ionic Polymerization Compounds in the Cationic Polymerization of Isobutylene.	213	
Zel'dov, Z., and A. Katz (Czechoslovakia). On the Role of Ion-polar Compounds in the Cationic Polymerization of Isobutylene.	262	45

KOROTKOV, A.A.; MITSENGENDLER, S.P.; KRASULINA, V.N.; VOLKOVA, L.A.

Synthesis of polymethyl methacrylate of regular structure. Vysokom.  
soed. 1 no.9:1319-1326 S '59. (MIRA 13:3)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Methacrylic acid)

MITSENGENDLER, S. P.

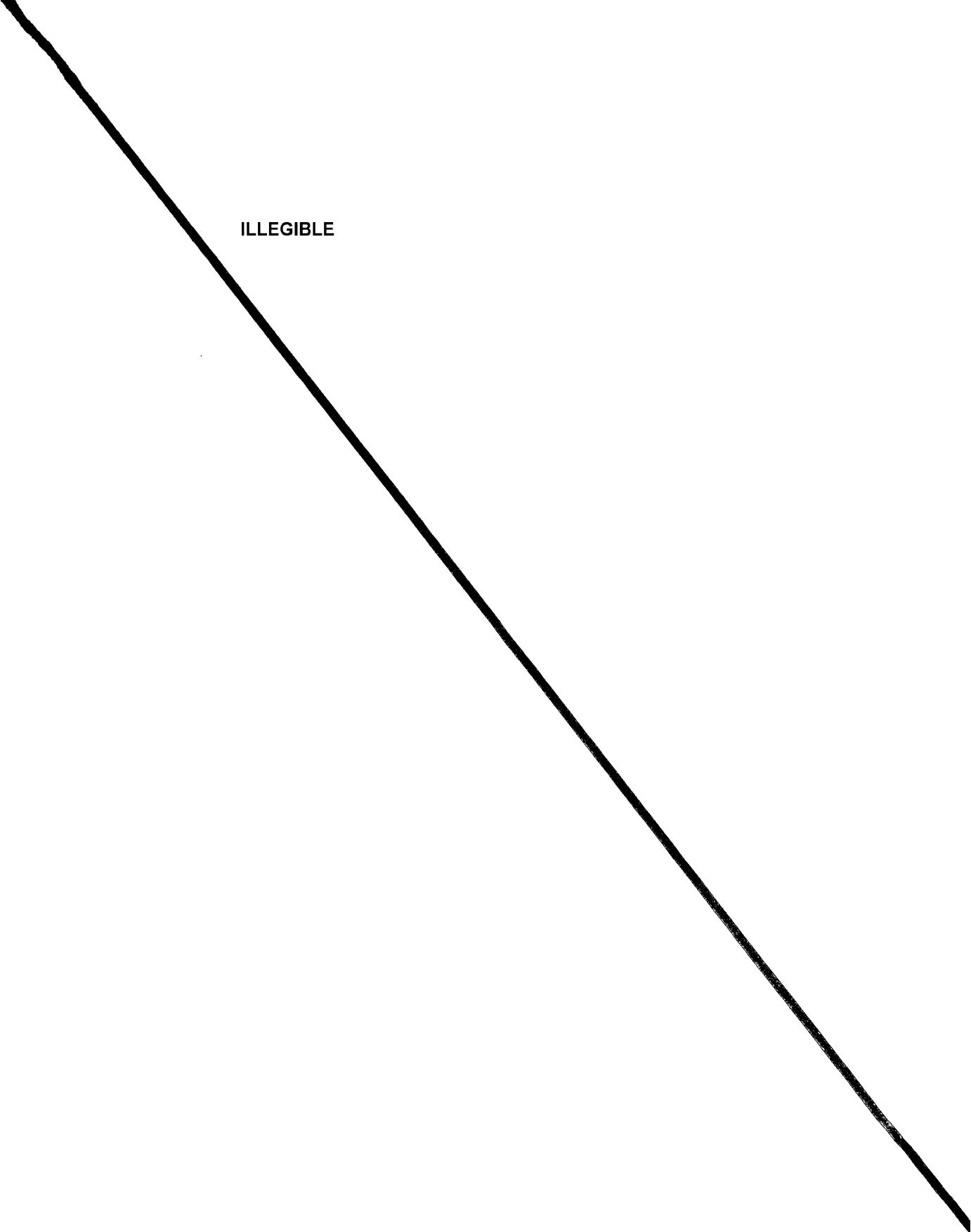
USHAKOV, S.N.; MITSENGENDLER, S.P.; KRASULINA, V.N.

Copolymerization of diethylene hydrocarbons with vinylalkyl ethers.  
Report No.2: Copolymerization of divinyl with vinylalkyl ethers  
in emulsion at low temperatures. Izv.AN SSSR Otd.khim.nauk no.4:490-493  
Ap '57. (MIRA 10:11)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.  
(Polymerization) (Ethers)

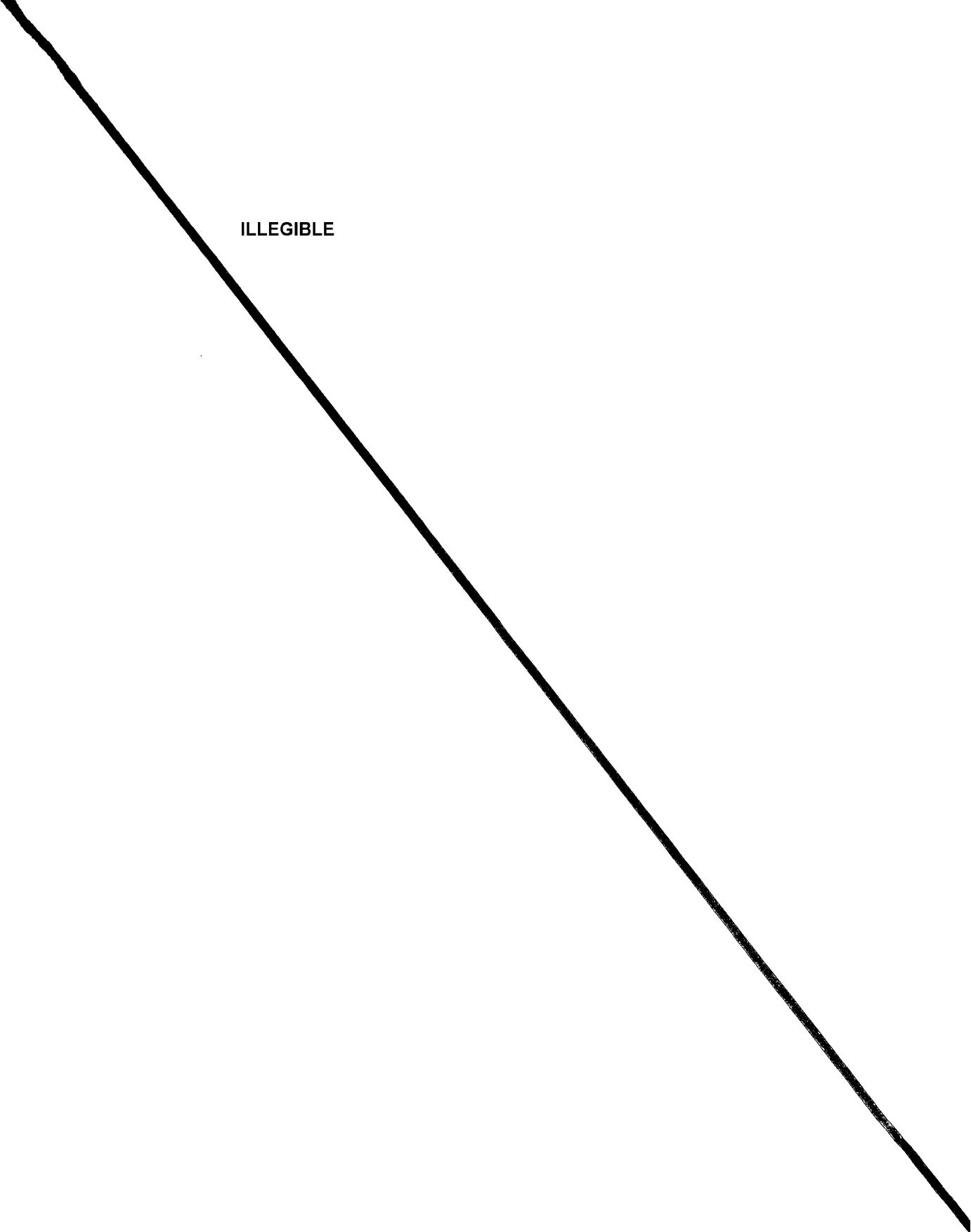
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ILLEGIBLE



USHAKOV, S.N.; MITSENGENDLER, S.P.; POLYATSKINA, B.M.

Application of newer methods of study to copolymerization of vinyl acetate with the maleates. Khim. i Fiz. Khim. Vysokomolekul. Soedineniy, Doklady 7-oy Konf. Vysokomolekul. Soedineniyam '52, 19-27. (MLRA 5:7)  
(CA 47 no.15:7820 '53)

183T36  
USCIB/Chemistry - Plastics

MAY 51

"Copolymerization of Vinyl Acetate and Maleic Anhydride and the Properties of the Copolymers Obtained," S. M. Ushakov, S. P. Mitsengendler, V. A. Chekhovskaya, Chair of Plastics, Leningrad Tech Inst

"Zaur Prik Khim" Vol XXIV, No 5, pp 485-489

Some relationships are observed in copolymerization of vinyl acetate with maleic anhydride as in the case of vinyl acetate and monomethyl maleate. Maleic anhydride, like its ester, can easily saponify with H<sub>2</sub>O to form high-mol compds with side rings on chain (lactones).

183T36

183T36  
USCIB/Chemistry - Plastics (Contd) MAY 51

combine with itself in presence of complex vinyl esters to yield copolymers contd higher than 50% maleic component. Obtained copolymers are easily saponified with H<sub>2</sub>O to form high-mol compds with side rings on chain (lactones).

MITSENGENDLER, S. P.

183T36

177T28  
USC/Chemistry - Synthetic Resins and  
Elastomers

Mar 51

"Effect of Solvents and Temperature on the Copolymerisation Constants of Vinylacetate and Monomethylmaleate," S. N. Ushakov, S. P. Mitsengendler, B. M. Polyatskina, Chair of Plastics, Leningrad Tech Inst Leningrad Lensovet

"Zav. FRIK Khim" Vol XXIV, No 3, pp 289-295

Final effects of solvents and temp on const o and p of copolymerization of vinylacetate and monomethylmaleate. Found no change of const in presence of

177T29  
USC/Chemistry - Synthetic Resins and  
Elastomers (Contd)

Mar 51

solvents. As to temp, found both const approximately equal between 56 and 78°C, but temp actually had small effect on const of copolymers.

MITSENGENDLER, S. P.

177T29

Application of the Equation of Copolymerization for Calculation of Composition and Structure of Copolymers. (In Russian.) S. N. Ushakov, S. P. Mitroengenov, and B. M. Polystikina. *Zhurnal Prilozheniye Khimii* (Journal of Applied Chemistry), v. 23, May 1950, p. 513-520.

Results of experimental investigation are tabulated and charted. Mechanism and kinetics are discussed. 11 ref.

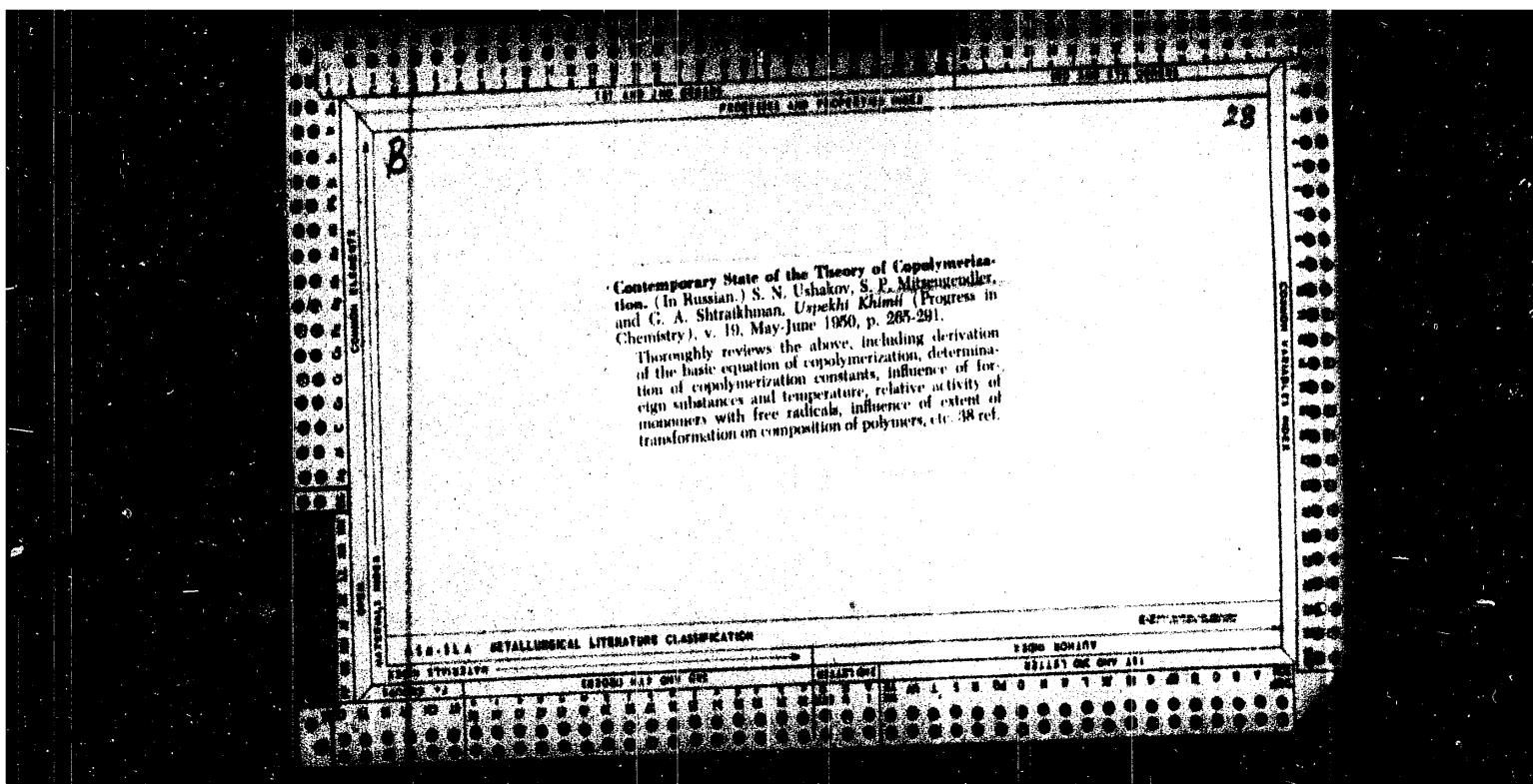
Application of the Equation of Copolymerization for Calculation of Composition and Structure of Copolymers. (In Russian.) S. N. Ushakov, S. P. Mitroengenov, and B. M. Polystikina. *Zhurnal Prilozheniye Khimii* (Journal of Applied Chemistry), v. 23, May 1950, p. 521-529.

Above was investigated in an attempt to explain the influence of extent of transformation on composition of the copolymers of vinylacetate and maleic ester (see above abstract), also to determine the composition of the copolymers by using the constants of copolymerization. Experimental data confirm validity of the calculations. Method of investigation is described. Data are tabulated and charted.

AM-11A METALLURGICAL LITERATURE CLASSIFICATION

1950 MAY 26 1951

1950 BIBLIOGRAPHY  
SEARCHED ONE DAY 2011



13  
26

Copolymerization of Complex Vinyl Esters with Maleates. I. Copolymerization of Ethylene Glycol Maleate with Vinylformate. (In Russian.) S. N. Ushakov and B. P. Mironov. *Zhurnal Prikladnoi Khimii (Journal of Applied Chemistry)*, v. 20, Dec. 1947, p. 1261-1269.

Describes a new type of synthetic resin prepared by above copolymerization. It is shown that the rate of formation of this resin is considerably higher than that of vinyl ester polymerization, which makes it possible to obtain products of greater transparency.

AIA-51A METALLURGICAL LITERATURE CLASSIFICATION											
SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED INDEXED SERIALIZED FILED							
SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED
SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED
SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED

CA

The kinetics and mechanism of the thermal decomposition of unsaturated hydrocarbons. VI. Polymerization of propylene at pressures above atmospheric. S. P. Miteshnikov. *J. Gen. Chem. (U.S.S.R.)* 7, 1848-57 (1937); cf. Moor and Shil'yeva, *C. A.* 31, 6380. — When propylene is heated at 490°, the rate of decompr., as at lower temp., is approx. 2nd order. The reaction is homogeneous in a Cu app., but Fe strongly catalyzes it. At 600° the reaction is approx. unimol., and Fe has little effect. However, at higher pressures, the decompn. products catalyze the reaction strongly. Polymerization is a secondary reaction under these conditions. The best yields of polymer are obtained at 621° and 40  $\mu$  atm., when not more than 40% of the propylene is decompd. in a Cu app. Under these conditions the yield of polymer is 85-90%, of which 70-80% consists of light hydrocarbons boiling up to 150°. H. M. Leicester

TECHNICAL ATTACHMENT CLASSIFICATION

UNCLASSIFIED BY [redacted]

## PROPERTIES AND PROPERTIES INDEX

The preparation of 8-aminoquinoline from 8-chloroquinoline. N. N. Vorontsov, Jr., and S. P. Mitzner. *J. Gen. Chem. (U. S. S. R.)* 6, 681-4 (1936); cf. *C. A.* 30, 4202g. — 8-Aminoquinoline (I), m. 64.5°, was obtained in 69.3% yield by heating 2.6 g. 8-chloroquinoline (II) with 20 mole. of 30% NH<sub>3</sub> and 0.26 g. CuCl catalyst in a rotary autoclave at 200° for 8 hrs. Increasing temp. decreased sharply the yields of I because of the decompn. of II. At 220° and 250° for 2.5 hrs. the decompn. of II increased to 76 and 83% and the yields of I decreased to 64 and 61.7%, resp. CuO and Cu + CuSO<sub>4</sub> catalysts gave inferior results. Redistn. of II under atm. pressure resulted in partial decompn. of II with the formation of HCl, m. 169-71.5° (decompn.). No decompn. of II takes place by distn. at 10-mm. pressure. C. B.

## ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

LEVEL OF SECURITY

GROUP

SUBGROUP

VOLUME

NUMBER

PAGE

MITSENGENDLER, S.P.

ca

PROCESSES AND PROPERTIES INDEX  
The preparation of 8-hydroxyquinoline from 8-chloro-  
quinoline. N. N. Voruchansky, Jr. and S. P. Mitzner.  
*J. Org. Chem. (U. S. S. R.)* 6, 63-7 (1961)

The direct prepn. of 8-hydroxyquinoline (I) from 8-chloroquinoline (II) by the action of dil. aq. NaOH is described. The 8-Cl is more reactive than either the 6-Cl or the Cl of PhCl. The app. was a rotary steel autoclave of 400-cc. capacity turning at 47 r. p. m. which was filled to the extent of 80%. The temp. range was 200-300°; the reaction time, 10 min. to 10 hrs., with NaOH concns. from 2-9%. Twice the theoretical amt. of NaOH was taken. The I formed was detd. bromometrically; the II which reacted, by weighing the NaCl produced. With 9% NaOH, 10 min., 90 atm. and 300°, 88% of II reacted and 84% of I was obtained. Reducing the temp. to 220° slowed up the reaction 12 times. At 220°, 10 hrs. are required for the conversion obtained at 300° in 10 min. With 3.5% NaOH, 2 hr., 90 atm. and 250°, 92.5% of II reacted and 87% of I was obtained. This time can be reduced to 20 min. with CuO catalyst but not with Cu. Lewis W. Butz

10

ASS-11A METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	INDEXED	SERIALIZED	FILED	SEARCHED	INDEXED	SERIALIZED	FILED
1	2	3	4	5	6	7	8

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MITSENGENDLER, J. E.

## PROCESSES AND PROPERTIES

2

Production of thiophenol and diphenyl sulfide from chlorobenzene. N. N. Vorontsov, Jr., and S. N. Mitrofanov. *Org. Chem. Ind. (U. S. S. R.)* 2, 687-91 (1958); cf. *C. A.* 58, 2340<sup>a</sup>, 4073<sup>b</sup>. Chas. Blance

## ENTOMOLOGICAL LITERATURE CLASSIFICATION

1998.06.19  
1998.06.19

Thiophenol. N. N. Vorozhtsov, Jr. and S. F. Mischenko. Russ. 34,554, Feb. 28, 1934. PhSH is prepared by heating PbCl under pressure at 300-60° with an eq. soln. of NaS.

B-Hydroxyquinoline. N. N. Vorozhtsov, Jr. and S. F. Mischenko. Russ. 36,152, Aug. 31, 1934. B-Chloroquinoline is heated to 200-300° with an solns. of alkalies or an anhydride under pressure and in the presence of metallic Cu or its compds. The product is separated from the reaction mass, in the usual manner.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION		CLASSIFICATION	
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1955</			

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

Reaction of chlorobenzene with sodium and phosphorus pentachloride. N. M. Vassilenkov, I.M. and G. D. Kostylev. Chem. Ind. Sci., No. 1, 1960, p. 100-101. The primary product of reaction of  $\text{PhCl}$  with  $\text{NaBH}_4$  (Kostylev) is  $\text{Ph}_2\text{B}(\text{Cl})_3$ , which reacts with  $\text{NaBH}_4$  (Vassilenkov) or  $\text{NaOCl}$  to yield  $\text{Ph}_2\text{B}(\text{Cl})_2\text{H}_2$  and  $\text{Ph}_2\text{B}(\text{Cl})_2\text{O}_2$ . The yield of secondary products increases with increasing temp., duration of reaction, and relative excess of  $\text{NaBH}_4$  or  $\text{NaOCl}$ . B. T.

AB-11A METALLURGICAL LITERATURE CLASSIFICATION

1960-1962196

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SEARCHED INDEXED

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

Diphenyl sulfide. Preparation of analogous organic  
compounds. N. N. VONOVTOV, JR., and S. F. MITASHENKOGAR. Russ.  
29,168, Apr. 21, 1932. PhoS is obtained by heating PhCl with an aq. soln. of NaHSO<sub>3</sub>  
under pressure  
NBS

ASA-3A METALLURGICAL LITERATURE CLASSIFICATION

EXCERPTA METALLURGICA

SEARCHED

INDEXED

SERIALIZED

FILED

KOLCHIN, N.I., zasl. deyatel' nauki i tekhniki RSFSR, doktor tekhn.  
nauk, prof.; VEYTS, V.L., kand. tekhn. nauk; MITSENGENDLER,  
M.L., inzh.; SMIRNOV, G.A., kand. tekhn. nauk, retsenzent;  
GINZBURG, Ye.G., kand. tekhn.nauk, red.; ONISHCHENKO, R.N.,  
red. izd-va; BARDINA, A.A., tekhn. red.

[Fundamental information on gear transmissions and meshings]  
Osnovnye svedeniia o zubchatykh peredachakh i zatsepleniiakh.  
Pod obshchei red. N.I.Kolchina. Moskva, Mashgiz, 1962. 144 p.  
(Bibliotekha zuboreza, no.1) (MIRA 16:1)  
(Gearing)

VYGODER, Mikhail Israilevich; MITSENGENDLER, Mikhail Litmanovich; KOLCHIN, N.I., prof., doktor tekhn.nauk, red.; ROMANTOV, Pyotr, kand. tekhn.nauk, red.; SHAVLYUGA, N.I., dotsent, kand.tekhn.nauk, red.; KUCHER, I.M., kand.tekhn.nauk, retezentsent; VASIL'IEVA, V.P., red. izd-va; POL'SKAYA, R.G., tekhn.red.

[Calculations and examples of adjustments of gear planing and shaping machines] Raschet i primery nalogok zubodolbeznykh i zubostrogal'nykh stankov. Pod red. N.I. Kolchina. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 117 p. (Bibliotekha zuboreza-novatora, no.4) (MIRA 12:2)  
(Gear-cutting machines)

MITSENGENDLER, Mikhail Litmanovich; GINZBURG, Ye.G., inzhener, retsenzent;  
KOLCHIN, N.I., professor, redaktor; TURETSKIY, I.Yu., kandidat  
tekhnicheskikh nauk, redaktor; SHAVLYUGA, N.I., dotsent, redaktor;  
VASIL'YEVA, V.P., redaktor izdatel'stva; POL'SKAYA, N.G., tekhnicheskiy redaktor

[Basic information on gear transmission] Osnovnye svedeniia o zubochatykh peredachakh. Pod red. N.I.Kolchina. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 63 p. (Bibliotekha subreza-novatora, no.1) (MLRA 10:3)  
(Gearing)

MITSENGENDLER, I.S.

Development of machining and assembly work at the Ural Machinery  
Plant during last 25 years. Shor.st.UZTM no.7:3-31 '58.  
(MIRA 12:6)  
(Sverdlovsk--Machinery industry)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700005-6

MITSENGENDLER, I. S., Eng.

"Reduction of the Production Cycle in Machining Large Parts" p. 595-602  
in book Increasing the Quality and Efficiency of Machinery, Moscow, Mashgiz, 1957,  
626pp.

MITSENGENDLER, I. S.

123-1-789

Translation from: Referativnyy Zhurnal, Mashinostroyeniye, 1957,  
Nr 1, p. 120 (USSR)

AUTHOR: Mitsengendler, I. S.

TITLE: Combination machining of Bed-Frames for Rolling Mills  
(Agregatnaya obrabotka stanin prokatnykh stanov)

PERIODICAL: Tekhnol. tyazh. mashinostroyeniya, 1956, Nr 1, pp. 3-8

ABSTRACT: Bibliographic entry. See also Referativnyy Zhurnal,  
Mashinostroyeniye, 1956, Nr 15, 18311

Card 1/1

Machining of Large Parts on a Platform 342

frame machining in five days as contrasted with the 2-3 months required for this cycle previously. The booklet describes the tool set-up and all the consecutive operations of the old and new methods of machining. The general conclusion of our experience based on successful utilization of the new method permits reduction of the production cycle time for large parts up to 1/3 - 1/4. There are no references or personalities mentioned.

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Specialized Machining Sector	11
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AVAILABLE: Library of Congress  
Card 2/2

JAG/MTL  
May 29, 1953

PHASE I BOOK EXPLOITATION 342

Mitsengendler, Iosif Solomonovich

Stendovaya obrabotka krupnykh detaley; iz opyta Uralmashzavoda  
(Machining of Large Parts on a Platform; Experience of the Ural  
Machine Plant) Moscow, Mashgiz, 1956. 41 p. 3,000 copies printed  
(Obmen tekhnicheskim opytom).

Reviewers: Kopaygorenko, V.M., Engineer, and Bakulin, M.V., Engineer;  
Tech. Ed: Duzina, N.A.

PURPOSE: This booklet is intended for engineering and technical  
personnel of machine-building plants.

COVERAGE: The author describes a progressive method of machining  
large parts. The method employed at the Ural Machine-  
Building Plant is based on the use of machine tools  
assembled from standardized components and technological  
processes of serial production. The machined part is a  
steel casting of a rolling-mill frame weighing 78 metric  
tons, with dimensions of 23.4 ft x 11.6 ft x 6.2 ft.  
Application of the new methods results in completion of the

Card 1/2

MITSENGENDLER, I.

Device for determining per cent difference of two quantities.  
Radio no. 8:30-31 Ag '62. (MURA 15:8)  
(Electronic industries--Quality control)  
(Electronic measurements)

TARASENKO, Mitrofan Ivanovich; MOROKHOVETS, Andrey Yevgen'yevich;  
IONIN, Sergey Mikhaylovich; MITSELOVSKIY, Eduard Sergeyevich;  
BULENKOV, Trifiliy Illarionovich; PERKOVSKAYA, G.Ye., red.;  
GOROKHOVA, S.S., tekhn. red.

[Laboratory work in inorganic chemistry] Praktikum po neorganicheskoi khimii. Moskva, Vysshiaia shkola, 1962. 219 p.  
(MIRA 15:10)

(Chemistry, Inorganic--Laboratory manuals)

MITSELOVSKIY, E. S., CAND CHEM SCI, METHOD OF PHYSIO-  
CHEMICAL TESTS BASED ON COMBINING THE PROCESS OF ELECTRO-  
MIGRATION ON PAPER WITH THE PROCESS OF OXIDATION-REDUCTION.  
MOSCOW, 1961. (MOSCOW STATE PED INST IM V. I. LENIN).  
(KL, 2-61, 200).

MITSELOVSKIY, E.S.

Phenomena accompanying the electromigration of organic substances  
when nonplatinum electrodes are used. Sbor. nauch. rab. MFI 2:90-  
(MIRA 14:1)  
91 '59.

1. Kafedra analiticheskoy khimii (zav. - prof. F.M. Shemyakin)  
Moskovskogo farmatsevticheskogo instituta.  
(ELECTROPHORESIS) (ELECTRODES)

MITSELOVSKIY, E.S.

Some new phenomena accompanying the electromigration of organic substances. Sbor. nauch. rab. MFI 2:87-89 '59. (MIRA 14:1)

1. Kafedra analiticheskoy khimii (zav. - prof. F.M. Shemyakin)  
Moskovskogo farmatsevicheskogo instituta.  
(ELECTROPHORESIS)

Separation of Mixtures of Cations and Anions with the  
Aid of the Method of Paper Chromatography

ASSOCIATION:

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Card 2/2

Mitselovskiy, E.S.

AUTHORS: Shemyakin, F. M., Mitselovskiy, E. S., and Kharlamov, I. P.

TITLE: Separation of Mixtures of Cations and Anions with the Aid of the Method of Paper Chromatography (Razdeleniye smesey kationov i anionov s pomoshch'yu metoda khromatografii na bumage)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, No. 1, pp. 30-34 (U.S.S.R.)

ABSTRACT: This is a survey of literature on the subject of the separation of mixtures of cations and anions with the aid of the method of paper chromatography. The first complete description of the process is ascribed to Ardenn, Burstall, Davies, Lewis and Lundstead in 1948 (1). Earlier workers were Tanayev in 1919, Flood (2) in 1939, and Lederer (4) in 1949. The latter determined the value of the ratio, Rf. Rf was found to rise with the increase of cations in the mixture. The equation for the material balance for the chromatographic process was developed by Pickering and Jacobs (12). The paper may be used as a surface-active sorbent according to Strain (14). The chromatographic separation of mixtures of chlorides and sulfates of alkali metals is told by Viswanathan (45). Altogether there are 70 consecutively numbered references, which are taken up one by one with a brief description of the contribution of difference sources as in the samples given above. There are 70 references, of which 5 are Slavic.

Card 1/2

MITSELOVSKIY, B.S.

SHEMYAKIN, F.M.; MITSELOVSKIY, B.S.; ROMANOV, D.V.; TSYURUPA, N.N.,  
redaktor; LUR'YI, M.S., tekhnicheskiy redaktor

[Chromatographic analysis; introduction to theory and practice]  
Khromatograficheskiy analiz; vvedenie v teorii i praktiki. Moskva,  
Gos. nauchno-tekh. izd-vo khim. lit-ry, 1955. 207 p. [Microfilm]  
(Chromatographic analysis) (MLRA 8:3)

MITSELOVSKIY, E. S.

USGS/Metals - Analysis

"Determination of Molybdenum in Ferrochromomolybdenum Alloys With Application of Cationite," I. N. Shnyakin, I. P. Kharlamov, E. S. Mitselovskiy

"Zavod Lab" Vol XVI, No 9, pp 1124, 1950

Describes method for determination of Mo in Fe-Cr-Mo-alloy with aid of sulfocarbon, from which cations were removed by treatment with hydrochloric acid. Method gives slightly lowered but quite satisfactory results.

PA 169759

MITSELOVSKIY, E. S.

USSR/Chemistry - Iron, Determination

Jun 50

"Chromatographic Determination of Iron Traces in Concentrated Sulfuric Acid,"  
F. M. Shemyakin, E. S. Mitselovskiy

"Zavod Lab" Vol XVI, No 6, p 748

Describes method developed and used by authors for determining traces of iron  
in concentrated chemically pure sulfuric acid when usual reaction with formation  
of Prussian blue is not sufficiently sensitive. Reaction sensitivity is %.  
Method is simple and convenient for application in any laboratory.

PA 163T5

COMPUTER PAPER

Modes of simultaneous separation of pairs of colored ions on columnar oxide. T. M. Shchegoleva and E. G. Mikhaleva. Doklady Akad. Nauk SSSR, 64, 280-283 (1949). Sharp zones of various pairs of salts of  $Pb^{++}$ ,  $Fe^{++}$ ,  $Cu^{++}$ ,  $Ni^{++}$ ,  $Co^{++}$ ,  $Zn^{++}$  were obtained in  $Al_2O_3$  columns 65 mm. high, 7 mm. in diam. Elemental conditions of sharp and uniform boundaries are: homogeneity of the grain size of  $Al_2O_3$ , absence of air bubbles, good wettability and slow (decreased) adsorb. of the salts. The rates of the progress of the front of the band of a given ion are dependent on the pairs  $Pb^{++}-Co^{++}$ ,  $Pb^{++}-Cu^{++}$  and  $Cu^{++}-Co^{++}$ ; taken in various orders, ratios at the const. concn. 0.1 M, follow the law  $a = X(1 - e^{-bt})$  where  $a$  = distance, in mm., except by the front of the band during the time  $t$ , in min.,  $X$  = limiting distance reached by the front at equil.; the constants  $b$  have the values: for  $Pb^{++} - 0.51$ ,  $Co^{++} - 0.18$ ,  $Cu^{++} - 0.14$ . Examples of data:  $Co^{++} - 0.05 M + Cu^{++} - 0.05 M$ , 1, 4, 5, 10, 25 min.,  $a$  for  $Co^{++} - 1.4$ , 4.8, 7.1, 8.5, 8.9; for  $Co^{++} - 0.2$ , 16.3, 20.0, 22.6, 25.4 mm.;  $Pb^{++} - 0.05 M + Cu^{++} - 0.05 M$ ,  $a$  for  $Pb^{++} - 2.0$ , 3.6, 4.6, 4.6, 4.6; for  $Co^{++} - 4.3$ , 17.0, 20.0, 21.2, 22.0 mm.;  $Pb^{++} - 0.05 M + Cu^{++} - 0.05 M$ ,  $a$  for  $Pb^{++} -$

1.6, 7.7, 12.8, 15.1, 18.1, for  $Co^{++} - 4.0$ , 14.4, 17.2, 21.3, 27.1 mm. The widths of the zones of each cation are a function of the relative concns.; in  $Co^{++}-Co^{++}$ , the width of the zone of  $Co^{++}$  decreases nearly linearly with its concn. (27 mm. at 0.10 M, 6 mm. at 0.01 M), that of  $Co^{++}$  decreases more slowly. In  $Co^{++}-Pb^{++}$  and in  $Co^{++}-Fe^{++}$ , there is a sharp sepa. into 2 zones at extreme concns. of one constituent; at nearly equal concns., there appears an intermediate mixed zone.

N. Then

## 458-114 METALLURGICAL LITERATURE CLASSIFICATION

1950-1959

1960-1969 1970-1979

1980-1989

8-27-1974

FROM BOLIVAR

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Chromatographic separation of cations with the aid of  $\alpha$ -hydroxyquinoline,  $\beta$ -naphthoquinoline, and cupferron. P. M. Shemyakin and E. S. Mischenko, *Zhur. Anal. Khim.*, 3, 349-53 (1948).  $\alpha$ -Hydroxyquinoline, m. 73°, 74°;  $\beta$ -naphthoquinoline, m. 92°, and cupferron, m. 150°, were tested as adsorbents for chromatographic sepn. of cations. The hydroxyquinoline was used by itself, the other 2 were mixed with potato starch in a ratio 1:1 by vol. A soln. contg. 2 cations in concns. of 0.05 M each was carefully percolated through the adsorber and the widening of adsorption bands with time was observed. The percolation continued until the widening ceased. The pairs of cations thus analyzed were: Cu-Fe, Cu-Ni, Cu-Co, Co-Ni, Ni-Pe, and Co-Pe. Only Cu-Ni formed 2 distinct bands. Of the other pair, the 2nd component was eluted after more or less time. Of the tested cations, Cu was adsorbed best and Fe least. On  $\beta$ -naphthoquinoline was tested the sepn. of Cu-Cu. No sepn. was visible. Treating the column with a soln. of NH<sub>4</sub>CNS prior to percolating the soln. produced 2 bands of which the 1st, Co, was eluted. The same pair was tested also on cupferron. Two bands were obtained with or without preliminary treatment with NH<sub>4</sub>CNS. M. Hosch

All Union Inst. Circular Materials

ASH-LLA METALLURGICAL LITERATURE CLASSIFICATION

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4

**PROPERTIES AND PREPARATION OF**

**Electrochemical oxidation of cobalt** [B. P. Matysik and  
and B. F. Ormont. *J. Gen. Chem. (U. S. S. R.)* **10**, 167-4  
(1940).] In the prep. of higher oxides of Co the super-  
position of a, c, on d, e, gave the best results as follows:  
c, d, 3200 amp., sq. in.; d, e, 2 amp., and a, c, 2 amp., per  
cell; anode surface 0.125 sq. cm.; duration of oxidation  
3 hrs. at 65°. The ppt. obtained weighed 10.20 mg., and  
contained 31.4% O (dry basis); accordingly the oxide is in-  
termediate between  $\text{Co}_2\text{O}_3$  and  $\text{Co}_3\text{O}_4$ . Therefore, oxides  
of Co with an O content higher than in  $\text{Co}_3\text{O}_4$  were not  
formed. Results agreed with the theoretical consideration  
of Ormont (cf. *J. Gen. Chem. (U. S. S. R.)* **10**, 158-60  
(1940)) as to the extreme difficulty of making the higher  
oxides of Co.

A. A. Podgorny

Lab. Complex & Heavy Compounds,  
Karpov Phys.-Chem. Inst., Moscow

MITSEL'MAKHERIS, V.G. (Vil'nyus)

First native doctors of medicine. Sov.zdrav. 22 no.4:40-43  
'63. (MIRA 16:4)  
(LITHUANIA---PHYSICIANS) (WHITE RUSSIA---PHYSICIANS)

MITSSEL' MAKHERIS, V.G., [Micelmacheris, V.G.], dotsent (Vil'nyus)

Hospitals in medieval Lithuania; celebrating 450 years of hospitals  
in Lithuania. Sov. zdav. 20 no.11:66-68 '61. (MIA 14:12)

1. Iz Vil'nyusskogo universiteta imeni V.Kapsukasa.  
(LITHUANIA...HOSPITALS)

MITSEL'MAKHERIS, V.G.

The brotherhood of Vilno barber-surgeons (1509-1833). Vest. Khir.  
85 no. 7:134-142 Je '60. (MIRA 14:1)  
(VILNIUS--SURGERY)

MITSEL'MAKHERIS, D. G.

MITSEL'MAKHERIS, V.G., dotsent; MISYURA, I.A., dotsent (Vil'nyus)

History of therapy instruction at the medical school of Vilnius University; 175th anniversary of the establishment of the school.  
Klin.med. 35 no.7:147-153 Jl '57. (MIR 10:11)

(SCHOOLS, MEDICAL, history,

Wilno Univ. (Rus))

(THERAPEUTICS, education,  
hist. (Rus))

MITSSEL' MAKHERIS, V.G., dotsent

The 175th anniversary of the medical department in Vilnius. Sov.  
zdrav. 16 no.4:57-60 Ap '57. (MIRA 10:8)

1. Iz kafedry gigiyeny meditsinskogo fakul'teta Vil'nyusskogo  
universiteta imeni V.Kapsukasa.  
(SCHOOLS, MEDICAL,  
Wilno's med.school (Rus))